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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FULLER, RODNEY EVAN

ART UNIT PAPER NUMBER

2851

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,992

Applicant(s)

DEL PUERTO ET AL.

Examiner

Rodney E Fuller

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 28-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 and 37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 28-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in Paper No. 3.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because the phrase "The present invention includes" can be implied. Correction is required. See MPEP § 608.01(b).

Drawings

4. New corrected drawings are required in this application because application was submitted with informal drawings. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

5. Claim 1 recites the limitation "a second gate valve" in line 6. There is insufficient antecedent basis for this limitation in the claim, i.e., there is no "first" gate valve in claim 1.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-27 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Hara, et al. (US 2001,0035942 A1).

Regarding claims 1 and 37, Hara discloses "a lithography patterning chamber (Fig. 1, ref.# 20); a wafer exchange (Fig. 1, ref.# 35) chamber coupled to said lithography patterning chamber; and at least one alignment load-lock (Fig. 1, ref.# 31, 36) separated from said wafer exchange chamber by a second gate valve (Fig. 1, ref.# 32, 37), said at least one alignment load-lock including an alignment stage that aligns a wafer."

Regarding claim 2, Hara discloses "wherein said wafer exchange chamber is separated from said lithography patterning chamber by a first gate valve (Fig. 1, ref.# 33, 38)."

Regarding claim 3, Hara discloses "wherein said alignment stage aligns said wafer during a pumpdown stage." (paragraph 0017)

Regarding claim 4, Hara discloses “wherein said at least one alignment load-lock is a bi-directional alignment load-lock separated from a track by a third gate valve.”

Regarding claim 6, Hara discloses “wherein said at least one alignment load-lock comprises a plurality of alignment load-locks.” (Fig. 1, ref.#s 31, 36)

Regarding claim 7, Hara discloses “wherein said at least one alignment load-lock comprises a first wall and a second wall diametrically opposite from said first wall, wherein said first wall has an opening comprising a motion feedthrough seal that allows a column to move and prevents the necessity of a rotary seal.” (Fig. 1, ref.#s 32, 33, 237, 38)

Regarding claim 8, Hara discloses “wherein said second wall has an opening comprising a motion feedthrough seal that allows a column to move and allows increased stability of the lithography system.” (Fig. 1, ref.#s 33, 38)

Regarding claim 11, Hara discloses “an illumination source (Fig. 1, ref.# 1) that emits light having an inspection wavelength, and a camera sensitive to said inspection wavelength.”

Regarding claim 13, Hara discloses “where in said at least one alignment load-lock further comprises wafer supports (Fig. 1, ref.#s 34, 39) for holding a wafer within said at least one alignment load lock.”

Regarding claim 14, Hara discloses “wherein said at least one alignment load-lock further comprises an alignment stage (Fig. 1, ref.#s 34, 39) separated from an alignment sub-stage disposed outside of said at least one alignment load-lock by a column extending through a floor of the at least one alignment load-lock.”

Regarding claim 19-25 and 37, Hara discloses “at least one chuck.” (Fig. 1, ref.# 16)

Regarding claims 26 and 27, Hara discloses "wherein said lithography patterning chamber includes at least one exposure stage that holds a chuck with a wafer during lithography patterning." (Fig. 1, ref.# 16)

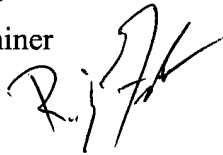
Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Tanaka, et al. (US 2002/0002946 A1) discloses a lithography system with a load-lock.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney Fuller whose telephone number is (703) 306-5641. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams, can be reached on (703) 308-2847.

Rodney Fuller
Primary Examiner



June 11, 2003